NEUTON POWER LITHIUM
For Better Power

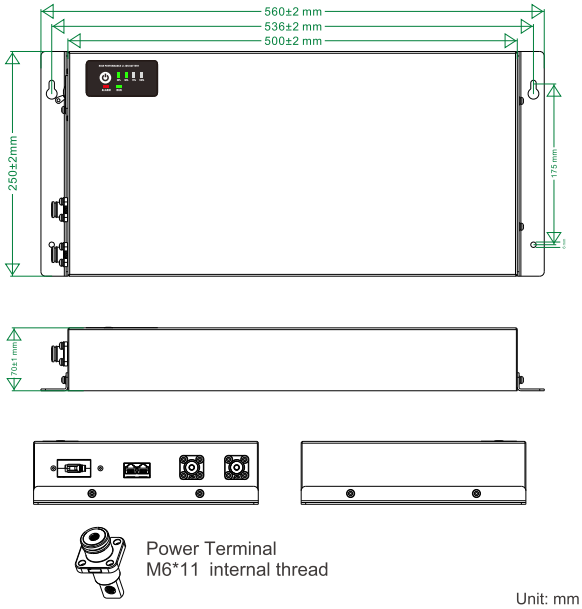
Neuton Power (12.8V) LFP

12.8V100Ah BT

LFP Li-ion Battery

NPL12-100MC

Dimension:



Power Terminal
M6*11 internal thread

Unit: mm

FEATURES

+ Prismatic LiFePO4 cells, High consistency, long cycle life and much more safety.
+ UN38.3 Certification
+ The cycle life over 3500 times @80%DOD

DESIGN

+ SPCC with black spraying case.
+ ON/OFF Button, LED indicators for SOC, RUN and ALM.
+ Communication port- RS485, CAN.
+ Fast charge performance.
+ -20~+55° C widely temperature range.
+ Maintenance free.

BATTERY MANAGEMENT SYSTEM (BMS)

+ Integrated software BMS .
+ Independent protection for charge and discharge.
+ Over voltage, low voltage, Over Current, Over temperature, Low temperature and short circuit protection.

12.8V100Ah BT

Model Part Number	NPL12-100MC
Nominal Voltage [V]	12.8
Nominal Capacity [Ah]	100
Total Energy [Wh]	1280
Max. Charging Current [A]	100
Recommended Charging Current [A]	50
Charging Voltage [V]	14.0~14.6
Max. Discharging Current [A]	100
End of Dicharge Voltage [V]	11.2
Pulse Discharge Current	300A @ 1s
Dimension [W*D*H, mm]	560*250*70
Weight [Kg]	14.0
Operation Humidity	0~95% RH (No condensing)
Operating Temperature Range	Charge: 0 ~ +50°C Discharge: -20 ~ +55°C
BMS Protection	Over charge Over discharge, Over current, Over temperature, Low temperature, Short circuit
Parallel Support	Yes, Max 4 Sets
Series Support (1)	Yes, Max 4 Sets
Cycle Life (2)	>3500
Designed Calendar Life	10 Years
Certification	UN38.3， MSDS

Note:
1.For series connection, don't support communication.
2.80%D OD and to 80% of initial capacity
3. To install Bluetooth App, search"Neuton Power" at Apple App store or Google play Or scan the QR code.

The datasheet is subject to change without prior notification.

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12.8V100Ah

The battery includes an integrated $LiFePO_4$ Battery Management System (BMS) that monitors and optimizes each individual prismatic cell during charging and discharging. It protects the battery pack from overcharge, over-discharge, high and low temperatures, over-current, and short circuits. Overall, the BMS ensures safe, efficient, and reliable operation of the battery.

Over-Charge Alarm & Protection	
Over-Charge Alarm	3.55V (For cell) 14.0V (For pack)
Over-Charge Protection	3.7V (For cell) 14.8V (For pack)
Over-Charge Protection Delay	1000 ms
Over-Charge Release	3.45V (For cell) 13.8V (For pack)
Over-Discharge Alarm & Protection	
Over-Discharge Alarm	2.8V (For cell) 11.2V (For pack)
Over-Discharge Protection	2.5V (For cell) 10V (For pack)
Over-Discharge Protection Delay	1000 ms
Over-Discharge Release	2.8V (For cell) 11.2V (For pack)
Over Current Alarm & Protection	
Charge Over Current Alarm	67.5A
Charge Over Current Protection	105A
Charge Over-Current Protection Delay	3S
Charge Over Current Protection Release	Automatic release after 1min and up to 3 times or Discharge
Discharge Over Current Alarm	105A
Discharge Over Current Protection-1	110A
Discharge Over Current Protection-1 Delay	13S
Discharge Over Current Protection-2	350A
Discharge Over Current Protection-2 Delay	3s
Discharge Over Current Protection Release	Automatic release after 1min and up to 3 times or Charge
Over Temperature Alarm & Protection	
Charge Low Temperature Alarm	7°C
Charge Low Temperature Protection	0°C
Charge Low Temperature Protection Release	5°C
Charge High Temperature Alarm	50°C
Charge High Temperature Protection	55°C
Charge High Temperature Protection Release	45°C
Discharge Low Temperature Alarm	-10°C
Discharge Low Temperature Protection	-20°C
Discharge Low Temperature Protection Release	-17°C
Discharge High Temperature Alarm	55°C
Discharge High Temperature Protection	60°C
Discharge High Temperature Protection Release	50°C
Short Circuit Protection	
Short Current Protection Delay Time	1500 uS
Short Current Release Method	Release load